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International Specialists in the Environmental Sciences

MEMORANDUM

DATE: November 15, 1985

TO: John Osborn, FIT-RPO, USEPA, Region X

THRU: Dave Buecker, FIT-RPM, E&E, Seattle

FROM: William Carberry, E&E, Seattle W

SUBJ: Cliff's Battery Service Trip Report

REF: TDD R10-8510-05

CC: Tom Tobin, E&E
Bernie Zavala, EPA

On October 30, 1985, Suzanne Milham, Washington Department of Ecology (DOE), and I conducted a preliminary site inspection of the Cliff's Battery Service site in Sunnyside, Washington. We were met at the site by Loren Rogers, the current owner of the property and the son of the former operator, C. A. Rogers, who is now deceased. We were allowed unrestricted access to all areas of the facility.

Cliff's Battery Service is an inactive automobile battery recycling facility located in a mixed residential and agricultural area. From approximately 1958 to approximately 1973 Mr. Rogers salvaged lead from storage batteries. Lead residue in the bottom of the battery casings was washed from the casings into a metal tub. After allowing the lead to settle, the tub was drained and the lead sludge was transferred to drums. The sludge, along with the lead plates, were shipped to a recycler in Seattle. Battery acid and the washed casings were disposed of in a shallow ravine along side the facility. A bulldozer was used periodically to level out and crush the casings.

Prior to the formation of the battery service the ravine was a marshy area that was recharged by drainage from agricultural fields located to the north. A drainage system, installed at the base of the fields, includes a culvert which carries drained water under the battery casing pile. It was not possible to determine how much, if any, of the battery pile is drained by this system, but a water sample from the culvert collected by DOE in July 1984 contained 0.595 mg/l of lead. The system drains to an unnamed tributary of the Sunnyside Canal, which in turn drains

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to the Yakima River.

An animal pasture, owned by Henry Stamaschror, is located to the south of the facility on the opposite side of Woodin Road and down gradient from the battery pile. In 1974, there was a period of heavy rainfall and the run-off from the agricultural fields surpassed the capacity of the drainage system. The excess water flowed through the battery pile, across the road and into the pasture. Shortly thereafter, Mr. Stamaschror started having problems with pastured animals getting sick and dying, but the cause of the morbidity has not been established. Two samples of the pasture soil were collected during the site inspection be submitted to a CLP laboratory for lead analysis.

The surface of most of the battery pile has been covered with dirt. However, there is an area on the north side of the site which has not been covered. Neighborhood children have built a bicycle cross-country track on the lot. Two surface soil samples were collected from the track and will be submitted for lead analysis.

All of the residences in the vicinity of the site use private wells as their sole drinking water source. There are an estimated 20 private wells within a quarter of a mile of the site. DOE sampled 3 of these wells in July 1984 but did not find any lead contamination.

During the last few years of operation, Cliff's Battery Service bought used tire balancing weights, melted them down onsite, and remolded the lead into new weights. The furnace used for this operation remains on-site, though it is in disrepair and is currently unusable. A filter/scrubber system was installed to reduce the lead fume and dust emissions from this operation. This business is also currently inactive.

There are four potential risk groups for lead exposure from this site; the neighborhood via the consumption of contaminated ground water, the children through the inhalation of the dust on the bicycle track, livestock through potential contamination the pasture, and workers if and when the furnace scrubber is dismantled.

E&E recommends that a sampling program be conducted at this site. Additional ground water and soil samples should be collected to ascertain if the quality of run-off water is being affected as it passes through the casings. The levels of certain metals in the scrubber billows should be assayed before that system is dismantled, assuming that the owner has such plans.